WHAT IS CLAIMED IS:

1. An opto-electrical device comprising:

an anode electrode;

a transparent cathode electrode; and

an opto-electrically active region located between the electrodes;

the cathode electrode including a first layer comprising a compound of a group 1 metal, a group 2 metal, or a transition metal; a second layer comprising a material having a work function below 3.5 eV; and a third layer spaced from the opto-electrically active region by the first and second layers and having a work function above 3.5eV.

2. An opto-electrical device as claimed in claim 1, wherein the compound is a compound of a group 1 metal or a group 2 metal.

3. An opto-electrical device as claimed in claim 1, wherein the compound is a compound of a group 1 metal.

4. An opto-electrical device as claimed in claim 1, wherein the compound is a compound of lithium.

5. An opto-electrical device as claimed in claim 1, wherein the compound is a halide.

6. An opto-electrical device as claimed in claim 1, wherein the compound is a fluoride.

7. An opto-electrical device as claimed in claim 1, wherein the first layer is spaced from the opto-electrically active region by the second layer.

8. An opto-electrical device as claimed in claim 1, wherein the second layer is spaced from the opto-electrically active region by the first layer.

9. An opto-electrical device as claimed in claim 1, wherein one of the first and second layers is adjacent the opto-electrically active layer.

10. An opto-electrical device as claimed in claim 1, wherein the second layer comprises a metal selected from the group consisting of Li, Ba, Mg, Ca, Ce, Cs, Eu, Rb, K, Y, Sm, Na, Sm, Sr, Tb, Yb, and alloys of two or more of those metals.

11. An opto-electrical device as claimed in claim 1, wherein the second layer is thicker than the first layer.

12. An opto-electrical device as claimed in claim 1, wherein the thickness of the first layer is between 10 Å and 150 Å.

13. An opto-electrical device as claimed in claim 1, wherein the compound has a work function below 3.5 eV and has a higher work function than the material having a work function below 3.5 eV of which the second layer is comprised.

14. An opto-electrical device as claimed in claim 1, wherein the thickness of the third layer is greater than 1000 Å.

15. An opto-electrical device as claimed in claim 1, wherein the material having a work function above 3.5 eV has an electrical conductivity greater than 10^5 $(\Omega.cm)^{-1}$.

16. An opto-electrical device as claimed in claim 1, wherein the material having a work function above 3.5 eV is selected from the group consisting of aluminum, gold, and indium-tin oxide.

17. An opto-electrical device as claimed in claim 1, wherein the opto-electrically active region is light-emissive.

18. An opto-electrical device as claimed in claim 1, wherein the opto-electrically active region comprises a light-emissive organic material.

19. An opto-electrical device as claimed in claim 18, wherein the light-emissive organic material is a polymer material.

20. An opto-electrical device as claimed in claim 18, wherein the light-emissive organic material is a conjugated polymer material.

21. An opto-electrical device as claimed in claim 18, further comprising a charge transport layer between the light-emissive organic material and one of the electrodes.

22. An opto-electrical device comprising:

an anode electrode;

a cathode electrode; and

an opto-electrically active region located between the electrodes;

the cathode electrode including a first layer comprising an organic complex of a group 1 metal, a group 2 metal, or a transition metal; a second layer comprising a material having a work function below 3.5 eV; and a third layer spaced from the opto-electrically active region by the first and second layers and having a work function above 3.5eV.

23. An opto-electrical device as claimed in claim 22, wherein the organic complex is an organic complex of a group 1 metal or a group 2 metal.

24. An opto-electrical device as claimed in claim 22, wherein the organic complex is an organic complex of a group 2 metal.

25. An opto-electrical device as claimed in claim 22, wherein the organic complex is an organic complex of calcium.

26. An opto-electrical device as claimed in claim 22, wherein the first layer is spaced from the opto-electrically active region by the second layer.

27. An opto-electrical device as claimed in claim 22, wherein the second layer is spaced from the opto-electrically active region by the first layer.

28. An opto-electrical device as claimed in claim 22, wherein one of the first and second layers is adjacent the opto-electrically active layer.

29. An opto-electrical device as claimed in claim 22, wherein the second layer comprises a metal selected from the group consisting of Li, Ba, Mg, Ca, Ce, Cs, Eu, Rb, K, Y, Sm, Na, Sm, Sr, Tb, Yb, and alloys of two or more of those metals.

30. An opto-electrical device as claimed in claim 22, wherein the second layer is thicker than the first layer.

31. An opto-electrical device as claimed in claim 22, wherein the thickness of the first layer is between 10 Å and 150 Å.

32. An opto-electrical device as claimed in claim 22, wherein the organic complex has a work function below 3.5 eV and has a higher work function than the material having a work function below 3.5 eV of which the second layer is comprised.

33. An opto-electrical device as claimed in claim 22, wherein the thickness of the third layer is greater than 1000 Å.

34. An opto-electrical device as claimed in claim 22, wherein the material having a work function above 3.5 eV has an electrical conductivity greater than 10^5 $(\Omega.cm)^{-1}$.

35. An opto-electrical device as claimed in claim 22, wherein the material having a work function above 3.5 eV is selected from the group consisting of aluminum, gold, and indium-tin oxide.

36. An opto-electrical device as claimed in claim 22, wherein the cathode is transparent.

37. An opto-electrical device as claimed in claim 22, wherein the opto-electrically active region is light-emissive.

38. An opto-electrical device as claimed in claim 22, wherein the opto-electrically active region comprises a light-emissive organic material.

39. An opto-electrical device as claimed in claim 38, wherein the light-emissive organic material is a polymer material.

40. An opto-electrical device as claimed in claim 38, wherein the light-emissive organic material is a conjugated polymer material.

41. An opto-electrical device as claimed in claim 38, further comprising a charge transport layer between the light-emissive organic material and one of the electrodes.

42. An opto-electrical device comprising:

an anode electrode;

a cathode electrode; and

an opto-electrically active region capable of generating an electrical field in response to light located between the electrodes;

the cathode electrode including a first layer comprising a compound of a group 1 metal, a group 2 metal, or a transition metal; a second layer comprising a material having a work function below 3.5 eV; and a third layer spaced from the opto-electrically active region by the first and second layers and having a work function above 3.5eV.

43. An opto-electrical device as claimed in claim 43, wherein the compound is a compound of a group 1 metal or a group 2 metal.

44. An opto-electrical device as claimed in claim 43, wherein the compound is a compound of a group 1 metal.

45. An opto-electrical device as claimed in claim 43, wherein the compound is a compound of lithium.

46. An opto-electrical device as claimed in claim 43, wherein the compound is a halide.

47. An opto-electrical device as claimed in claim 43, wherein the compound is a fluoride.

48. An opto-electrical device as claimed in claim 43, wherein the first layer is spaced from the opto-electrically active region by the second layer.

49. An opto-electrical device as claimed in claim 43, wherein the second layer is spaced from the opto-electrically active region by the first layer.

50. An opto-electrical device as claimed in claim 43, wherein one of the first and second layers is adjacent the opto-electrically active layer.

51. An opto-electrical device as claimed in claim 43, wherein the second layer comprises a metal selected from the group consisting of Li, Ba, Mg, Ca, Ce, Cs, Eu, Rb, K, Y, Sm, Na, Sm, Sr, Tb, Yb, and alloys of two or more of those metals.

52. An opto-electrical device as claimed in claim 43, wherein the second layer is thicker than the first layer.

53. An opto-electrical device as claimed in claim 43, wherein the thickness of the first layer is between 10 Å and 150 Å.

54. An opto-electrical device as claimed in claim 43, wherein the compound has a work function below 3.5 eV and has a higher work function than the material having a work function below 3.5 eV of which the second layer is comprised.

55. An opto-electrical device as claimed in claim 43, wherein the thickness of the third layer is greater than 1000 Å.

56. An opto-electrical device as claimed in claim 43, wherein the material having a work function above 3.5 eV has an electrical conductivity greater than 10^5 $(\Omega.cm)^{-1}$.

57. An opto-electrical device as claimed in claim 43, wherein the material having a work function above 3.5 eV is selected from the group consisting of aluminum, gold, and indium-tin oxide.

58. An opto-electrical device as claimed in claim 43, wherein the cathode is transparent.

59. An opto-electrical device as claimed in claim 43, wherein the opto-electrically active region comprises a polymer material.

60. An opto-electrical device as claimed in claim 43, wherein the opto-electrically active region comprises a conjugated polymer material.

61. An opto-electrical device as claimed in claim 43, further comprising a charge transport layer between the opto-electrically active region and one of the electrodes.